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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,629

11/10/2003

Tadao Yamaguchi

F-7998

4798

28107

7590

11/22/2004

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EXAMINER

LE, DANG D

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 11/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/705,629

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Dang D Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/1/03 &amp; 11/10/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it contains more than 150 words and the word "comprises" at line 15. Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: the commutator (5) is identified as rectifier, the printed circuit board (1) is also identified as rectifier in page 8, second paragraph.

Appropriate correction is required.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "5" has been used to designate both rectifier and weight. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is not clear if "a casing" and "a housing" at line 11 are the same components at line 17.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (2003/0015929) in view of Kroy et al. (4,644,202).

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Regarding claim 1, Lee shows an axial air-gap vibration motor comprising:

- A printed wiring board (210) wherein a commutator (220) is disposed on a first surface; a
- A resin shaft holder (250) is integrally formed on a second surface; one sintered-oil impregnated bearing (b) is contained in this shaft holder; and further, a plurality of air-core armature coils having at least one winding-type air-core armature coil are eccentrically disposed outside such resin holder in the radial direction;
- An eccentric rotor wherein an eccentric weight (23) is disposed so as to not overlap at least one of said winding-type air-core armature coils and comprising a connection terminal part on the first side of said printed wiring board so as not to overlap with said air-core armature coils;
- A shaft fixed so that a first end thereof does not protrude from a housing;
- A magnet (130) for imparting a magnetic field to said eccentric rotor via an axial air gap;
- A brush (120) for imparting electric power to the air-core armature coils via said commutator; and
- A housing (150) containing the aforementioned and comprising a casing and a bracket; wherein:
- Said shaft, after the eccentric rotor is rotatably mounted at the second end, is received by said bracket (100), preventing movement in the radial direction.

Lee does not show a shaft fixed beforehand by welding to a casing from the outside.

Kroy et al. shows a shaft fixed beforehand by welding to a casing from the outside for the purpose of holding the shaft in place.

Since Lee and Kroy et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to weld the shaft to a casing from the outside as taught by Kroy et al. for the purpose discussed above.

9. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (2003/0015929) in view of Kuyama et al. (6,417,589).

Regarding claim 1, Lee shows an axial air-gap vibration motor comprising:

- A printed wiring board (210) wherein a commutator (220) is disposed on a first surface; a
- A resin shaft holder (250) is integrally formed on a second surface; one sintered-oil impregnated bearing (b) is contained in this shaft holder; and further, a plurality of air-core armature coils having at least one winding-type air-core armature coil are eccentrically disposed outside such resin holder in the radial direction;
- An eccentric rotor wherein an eccentric weight (23) is disposed so as to not overlap at least one of said winding-type air-core armature coils and

- comprising a connection terminal part on the first side of said printed wiring board so as not to overlap with said air-core armature coils;
- A shaft fixed so that a first end thereof does not protrude from a housing;
  - A magnet (130) for imparting a magnetic field to said eccentric rotor via an axial air gap;
  - A brush (120) for imparting electric power to the air-core armature coils via said commutator; and
  - A housing (150) containing the aforementioned and comprising a casing and a bracket; wherein:
  - Said shaft, after the eccentric rotor is rotatably mounted at the second end, is received by said bracket (100), preventing movement in the radial direction.

Lee does not show a shaft fixed beforehand by welding to a casing from the outside.

Kuyama et al. shows a shaft fixed beforehand by welding (41) to a casing from the outside for the purpose of connecting two components together.

Since Lee and Kuyama et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to weld the shaft to a casing from the outside as taught by Kuyama et al. for the purpose discussed above.

Regarding claims 2 and 3, it is noted that Lee and Kuyama et al. also show all of the limitations of the claimed invention.

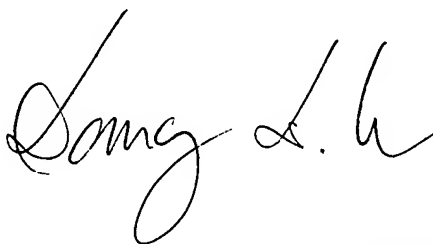
***Information on How to Contact USPTO***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/13/04

A handwritten signature in black ink, appearing to read 'Dang D. Le', with a stylized, cursive script.

**DANG LE  
PRIMARY EXAMINER**